

Appl. No.: 09/745,289
Amdt. dated 08/30/2005
Reply to Official Action of April 21, 2005

REMARKS/ARGUMENTS

This communication is filed in response to the second Official Action of April 21, 2005. The second Official Action no longer rejects Claims 14, 21 and 26 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Nonetheless, the Official Action continues to reject Claims 1, 3-14 and 17-25 and 30-42 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,446,066 to Horowitz, in view of U.S. Patent No. 6,298,357 to Wexler et al. Applicants note that although the Official Action also similarly rejects Claim 15, Applicants cancelled Claim 15 in response to the first Official Action. The second Official Action also rejects Claims 2 and 16 under 35 U.S.C. § 103(a) as being unpatentable over the Horowitz patent in view of the Wexler patent, and further in view of U.S. Patent No. 6,671,853 to Burkett et al. In addition, the second Official Action now rejects Claims 26-29 under 35 U.S.C. § 103(a) as being unpatentable over the Horowitz patent in view of the Wexler patent, and further in view of U.S. Patent No. 6,253,239 to Shklar et al.

As explained below and in contrast to the allegations of the first Official Action, Applicants respectfully submit that the claimed invention is patentable over the Horowitz, Wexler, Burkett and Shklar patents, taken individually or in combination. Thus, Applicants respectfully traverse the rejections of the claims as being unpatentable over various combinations of the Horowitz, Wexler, Burkett and Shklar patents. Applicants have, however, added new Claims 43-53 to claim additional patentable features of the present invention. Applicants note that, as second Official Action fails to substantively address most of the remarks presented in response to the first Official Action, portions of the explanation below are the same as corresponding portions of the first Official Action. In view of the added claims and the remarks presented herein, Applicants respectfully request reconsideration and allowance of all of the claims of the present application.

A. Request for Telephone Interview

Applicants' counsel hereby requests a telephone interview after the Examiner has had an opportunity to review the remarks provided below. Such an interview would be brief and would

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focus only on the current rejections and cited references. Applicants' counsel, Andrew Spence, can be reached at 704-444-1411.

B. Request for Clarification as to Cited Portions of Horowitz

Initially, Applicants note their failure to appreciate how various cited passages of the Horowitz patent teach or suggest the features of the claimed invention for which those passages are cited. And as such, Applicants respectfully request clarification as to how the cited passages of the Horowitz patent teach or suggest the features of the claimed invention for which those passages are cited. For example, Applicants respectfully request clarification as to how the cited passages of the Horowitz patent teach or suggest the elements of Claims 5, 8 (and similarly 13), 9, 12, 21, 24, 25, 30-36, 41 and 42. In this regard, the Official Action recites column 4, lines 33-42 of Horowitz as disclosing the subject matter of dependent Claim 41, which recites that the received file is an email file. However, Applicants fail to note any portion of Horowitz, much less column 4, lines 33-42, that disclose an email file organized in a hierarchy from which subdocuments are derived.

C. Horowitz is Non-Analogous to the Claimed Invention

Applicants also respectfully submit that the Horowitz patent is non-analogous art to the claimed invention, and as such, cannot properly be relied upon as a basis for rejection 35 U.S.C. § 103(a). MPEP § 2141.1(a). As explained in the MPEP, to be analogous, a reference must either be in the same field as Applicant's endeavor, or if not, then be reasonably pertinent to the particular problem with which the invention is concerned. *Id.* In this regard, the Federal Circuit has stated that matter disclosed in the reference must be such that it logically would have commended itself to an inventor's attention in considering the inventor's problem. *See In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

As guidance on the issue of what is considered analogous art and what is not analogous art, MPEP § 2141.1(a) describes the case of *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993), in which an application was directed to a SIMMs memory module for use in a personal computer. The Examiner in *Wang Laboratories* cited prior

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art that was related to SIMMs for use in industrial products. The Federal Circuit determined that the reference cited by the Examiner was non-analogous art because the claimed invention related to compact modular memories, while the prior art related to systems that allow for interchangeability of different size memories.

In the instant case, the claimed invention is related to systems and methods for processing a document into subdocuments for separate delivery to a client, while the Horowitz patent relates to performing text-based searches of a database. As explained in the specification of the present application, the claimed invention facilitates transmission and rendering of documents on devices with limited display and/or computing resources, as compared to devices for which the documents were originally designed. The Horowitz patent, on the other hand, performs an analysis of a database to represent the data stored therein in a manner that facilitates performing text-based searches of the content.

As shown, then, there must be a very close nexus between the fields disclosed in the references. In the example in the MPEP, both the claimed invention and the prior art cited by the Examiner included information about SIMMs memories, and the Federal Circuit still found the reference non-analogous. The instant case is much further away from this example. The claimed invention is directed to processing a deriving subdocuments for delivery to a client to improve transmission and display of the subdocuments at the client, while the Horowitz patent is directed to analyzing a database to improve text-based searches thereof. Applicants respectfully submit that if the Federal Circuit did not find references to be analogous where both references mentions SIMMs memory devices where the only distinction was the application of the SIMMs devices, then how could a reference concerning text-based searching a database relate to a system and method facilitating delivery of a document to a client?

For at least the foregoing reasons, Applicants respectfully submit that as the Horowitz patent is non-analogous to the claimed invention, the Horowitz patent cannot be relied on as a basis for rejection under 35 U.S.C. § 103(a).

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D. Claims 1, 3-14 and 17-25 and 30-42 are Patentable over Horowitz/Wexler

As indicated above, the second Official Action continues to reject Claims 1, 3-14 and 17-25 and 30-42 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As suggested above, the Horowitz patent provides a system and method for performing text-based searches of a database. As disclosed, a database is inverted by first dividing documents stored in the database into subdocuments. For example, a document can be divided into subdocuments along paragraph breaks in the document, although long paragraphs may be broken into several subdocuments and short paragraphs may be aggregated into a single subdocument. Then, the subdocuments are traversed to generate term lists associating subdocument terms and identifiers of corresponding subdocuments within which the terms occur. After inverting the database, the subdocument lists are represented with encoded bit strings, from which logical combinations can be obtained by identifying the intersection, union, and/or inversion of a plurality of the bit strings. And as keywords for a database search can be identified by selecting terms of the inverted database, the logical combinations of bit strings can be used to represent text-based search results over the database.

The Wexler patent provides a system and method for extracting structure information from an unstructured electronic document. As disclosed, the method includes building a tree structure that represents the hierarchical organization of an unstructured document. For example, as shown in FIG. 8 of the Wexler patent, the tree structure of a document (Root) can include segments representing chapters (C1 - C3) and an appendix (A1), two of which include a pair of sections (S1, S2 for each of C2 and C3). As also shown, one of the chapters and each of the sections include a plurality of paragraphs (P1 - Pn). As also disclosed, a structured representation of the unstructured document is built based upon the tree structure, where the structured representation can be divided into sub-documents. In this regard, the document can be divided into subdocuments for each section (S1, S2 for each of C2 and C3) of the document.

1. Claims 1, 17, 30, 31, 38-42 are Patentable

Independent Claim 1 of the present application provides a method that includes receiving a machine readable file containing a document that is to be served to a client for display on a

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client device. As recited, the organization of the documents in the file is expressed as a hierarchy of information. The method also includes deriving subdocuments from the hierarchy of information. As derived, the subdocuments are expressed in a format that permits the subdocuments to be served separately to the client. Further, at least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments.

In contrast to the method of independent Claim 1, the Horowitz patent does not teach or suggest deriving subdocuments from a hierarchy of information such that at least one of the subdocuments is expressed in a format that permits the subdocument to be served separately to the client, where at least one of the subdocuments includes information that enables it to be linked to another one of the subdocuments. The Official Action, in fact, concedes that the Horowitz patent does not teach or suggest deriving subdocuments from the hierarchy of information of the document included in the machine readable file in a manner in accordance with independent Claim 1. Nonetheless, the Official Action alleges that the Wexler patent discloses this feature, and that it would have been obvious to one skilled in the art to modify the Horowitz patent to include this feature since smaller files are more easily downloaded and viewed using a web browser.

Applicants respectfully submit, however, that even if the Horowitz patent is analogous art to the claimed invention, and even if Horowitz patent and the Wexler patent do disclose the respective elements of the claimed invention, as alleged by the Official Action (although expressly not admitted as such by Applicants), the Horowitz patent and the Wexler patent cannot properly be combined to teach the claimed invention of independent Claim 1, as suggested by the Official Action. As explained above, the Horowitz system divides a document into subdocuments for the purpose of more efficiently performing text-based searches of the subdocuments. Thus, as the Horowitz system divides the document for the purpose of treating the subdocuments independent of one another, the Horowitz system would appear to have no need to provide a subdocument with information that enables it to be linked to another one of the subdocuments, as recited by independent Claim 1. In fact, Applicants respectfully submit that the intended purpose of the Horowitz system, i.e., performing text-based searches, would receive

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no appreciable benefit or advantage by including, in a subdocument, information linking it to another one of the subdocuments.

The Official Action alleges that one skilled in the art would be motivated to modify the system and method of the Horowitz patent to include a subdocument deriving feature of the Wexler patent to thereby provide the advantage of smaller files being downloaded and viewed using a web browser. Even presuming that the teachings of the Wexler patent result in smaller files that are advantageous for downloading and viewing using a web browser, however, the Horowitz patent does not disclose any functions that would enjoy those advantages. That is, the Horowitz patent does not teach or suggest downloading the results of a text-based search, or viewing such results using a web browser.

As indicated above, the Horowitz patent discloses a system and method for performing a text-based search of a database. More particularly, the Horowitz patent provides a computer system for performing the text based search of a database. As disclosed, the computer system includes a computer that interacts with a disk storage unit storing the database within which to perform the text-based search. The Horowitz patent does not disclose, however, downloading documents in the database or results of searching documents in the database, or viewing such documents or search results using a web browser. Further, even if the Horowitz patent did somehow teach or suggest downloading documents or search results from the database, the Horowitz patent does not teach or suggest downloading documents or search results in a manner that would benefit from the teachings of the Wexler patent. That is, the Horowitz patent does not teach or suggest downloading documents or search results in a manner that would benefit from smaller files generated by the Wexler patent. If anything, the disclosed arrangement of the Horowitz system suggests that the database is coupled proximate the computer. In such instances, as is well appreciated by those skilled in the art, data transfer latencies are often unaffected by file size due to the short distance traversed by data between the database and the computer such that any arguable advantage achieved by smaller file sizes are minimal, if any.

Applicants therefore respectfully submit that the Horowitz and Wexler patents cannot properly be combined to teach or suggest the claimed invention of independent Claim 1. Since the claimed invention of independent Claim 1 is patentably distinct from both the Horowitz and

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Wexler patents, taken individually, for the reasons described above, the rejection of independent Claim 1 is therefore overcome. Applicants also respectfully submit that the claimed invention of independent Claims 38 and 39 recite subject matter similar to that of independent Claim 1, and are therefore patentably distinct from the Horowitz and Wexler patents for at least the same reasons given above with respect to independent Claim 1. In this regard, independent Claims 38 and 39 recite an apparatus and machine-readable program, respectively, including receiving a machine readable file containing a document, and deriving subdocuments from the file, both in a manner similar to that of independent Claim 1.

Independent Claim 17 recites a method that includes receiving from a client a request for a document to be displayed on a client device. The method of independent Claim 17 also includes separately serving, to the client, a subdocument that represents less than all of the requested document, where the subdocument contains information that links it to at least one other subdocument. In addition, an invocation of the link to the other subdocument is received from the client, and the other subdocument is separately served to the client device.

In contrast to the method of independent Claim 17, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest receiving (from a client) a request for a document, separately serving (to the client) a subdocument of the document that includes information linking it to at least one other subdocument, receiving an invocation (from the client) of the link to the other subdocument, and serving separately the other subdocument. The Wexler patent does disclose dividing a document into subdocuments, where a number of subdocuments include links from a parent subdocument to thereby create a natural flow from one subdocument to the next. The Wexler patent also discloses that when the system encounters a link node of the document structure tree, the system resolves the link by finding the row in a link destination table providing requisite information relating to the link. Thus, it appears that the Wexler system itself rearranges the document from the subdocuments based upon the links listed in the link destination table. Upon request, then, the Wexler system would appear to rearrange the document from its constituent subdocuments without interaction from the client, much less without receiving, from the client, an invocation of the link to another subdocument from the served subdocument, as recited by independent Claim 17.

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Applicants therefore respectfully submit that the claimed invention of independent Claims 1, 17, 38 and 39 are patentably distinct from the Horowitz patent and the Wexler patent, taken individually or in combination. Also, as dependent Claims 30, 31 and 40-42 depend, directly or indirectly, from independent Claim 1, Applicants respectfully submit that dependent Claims 30, 31 and 40-42 are patentably distinct from the Horowitz patent and the Wexler patent, taken individually or in combination, for at least the same reasons given above with respect to independent Claim 1. In addition, Applicants respectfully submit that various ones of dependent Claims 30, 31 and 40-42 recite features further patentably distinct from the Horowitz patent and the Wexler patent, taken individually or in combination.

For example, Claim 30 (depending from independent Claims 1, 17 or 21) further recites that the subdocuments are derived from the document at the time of a request from the client device for the document. In contrast, Applicants respectfully submit that neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest when a document is divided into subdocuments, much less in relation to receiving a request from a client device for the document. In fact, both the Horowitz patent and the Wexler patent suggest that the documents of the respective systems are divided well in advance of receiving any type of request from a user. In this regard, the Horowitz system divides a document into subdocuments when inverting the database, after which term lists are generated and stored in accordance with a run length encoding technique. As the encoded term lists are then used in a text-based search operation, the Horowitz system necessarily divides the document into subdocuments well before receiving the text-based search request. The Wexler patent similarly discloses that its technique of organizing components of a document in a structural manner permits global operations to be performed based upon the structural organization.

Also, for example, in contrast to the method of dependent Claim 31, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving the subdocuments based upon characteristics of the client device. The Official Action cites the Horowitz patent for support of this feature of the claimed invention. Applicants respectfully submit, however, that even considering that the Horowitz patent discloses a client device for displaying search results, the Horowitz patent does not teach or suggest dividing documents of a

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database based upon characteristics of the client device. In this regard, as explicitly disclosed by the Horowitz patent, documents are divided based upon paragraph boundaries of the documents. Similarly, the Wexler patent discloses dividing documents based upon section segments of the documents. Therefore, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving subdocuments based upon characteristics of the client device, as recited by dependent Claim 31.

2. Claims 3-8 are Patentable

The Official Action rejects Claims 3-8 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the method of independent Claim 1 is patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 3-8 each depend, directly or indirectly, from independent Claim 1, Applicants respectfully submit that dependent Claims 3-8 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above with respect to independent Claim 1.

In addition, in contrast to the method of dependent Claim 8, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest receiving the file (including the document) expressed in a language that does not organize segments of the document in a hierarchy, and deriving the subdocuments by first converting the file to a language that organizes segments of the document in a hierarchy. The Official Action alleges that the Horowitz patent discloses this feature of the claimed invention in columns 3-4. Applicants respectfully submit, however, that with respect to dividing a document into subdocuments, the Horowitz patent merely discloses that the subdocuments generally correspond to paragraphs of the document. The Horowitz patent does not teach or suggest converting a file containing the document from one language to another, much less from a language that does not organize segments of the document in a hierarchy, to a language that does organize segments of the document in a hierarchy, as recited by dependent Claim 8.

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3. Claim 9 is Patentable

The Official Action also rejects Claim 9 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the method of independent Claim 1 is patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claim 9 depends from independent Claim 1, Applicants respectfully submit that dependent Claim 9 is patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above with respect to independent Claim 1.

4. Claims 10, 18 and 22 are Patentable

In addition, the Official Action rejects Claims 10, 18 and 22 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above and below, the methods of independent Claims 1, 17 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 10, 18 and 22 each depend, directly or indirectly, from respective ones of independent Claims 1, 17 and 21, Applicants respectfully submit that dependent Claims 10, 18 and 22 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claims 1, 17 and 21.

5. Claims 11 and 23 are Patentable

The Official Action rejects Claims 11 and 23 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above and below, the methods of independent Claims 1 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 11 and 23 each depend, directly or indirectly, from independent Claims 1 and 21, respectively, Applicants respectfully submit that dependent Claims 11 and 23 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claims 1 and 21.

In further contrast to the methods of dependent Claims 11 and 23, neither the Horowitz patent nor the Wexler patent, taken individually or in combination, teach or suggest that subdocuments are requested by the client based on the contained information that enables the

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subdocuments to be linked to other subdocuments (Claim 11), where the information comprises a URL (Claim 23). Conceding that the Horowitz patent does not teach or suggest these features, the Official Action alleges that the features are disclosed by the Wexler patent, and that it would have been obvious to one skilled in the art to modify the Horowitz system and method to include the feature to provide a natural flow from one document to the next.

As explained above with respect to independent Claim 17, the Wexler patent does disclose dividing a document into subdocuments, where a number of subdocuments include links from a parent subdocument to thereby create a natural flow from one subdocument to the next. The Wexler patent also discloses that when the system encounters a link node of the document structure tree, the system resolves the link by finding the row in a link destination table providing requisite information relating to the link, thereby suggesting that the system itself rearranges the document from the subdocuments based upon the links listed in the link destination table. In contrast to the Official Action, however, nowhere does the Wexler patent teach or suggest that a user requests a subdocument based on information (e.g., URL) in a subdocument that enables the subdocument to be linked to another of the subdocuments, as recited by dependent Claim 11. Moreover, even if the Wexler patent did disclose such a request, nowhere does the Wexler patent teach or suggest that the information enabling a subdocument to be linked to another subdocument comprises a URL, as recited by dependent Claim 23. If anything, the Wexler patent discloses that the links are provided via a tree structure notation for rearranging a document from subdocuments.

6. Claims 12, 24 and 25 are Patentable

The Official Action rejects Claims 12, 24 and 25 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above and below, the methods of independent Claims 1 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 12, 24 and 25 each depend, directly or indirectly, from respective ones of independent Claims 1 and 21, Applicants respectfully submit that dependent Claims 12, 24 and 25 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claims 1 and 21.

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Also in contrast to the method of dependent Claim 12, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest identifying a portion of the document that is to be displayed separately from the rest of the document, excluding that portion from the subdocument in which that portion would have otherwise appeared, and including that portion in at least one corresponding subdocument. Further in contrast to the method of dependent Claim 12, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest that when the subdocument in which the excluded portion would otherwise have appeared is served to the client device, embedding a graphical device that can be invoked by the user to retrieve the subdocument that includes that portion that is to be displayed separately from the rest of the document. The Official Action alleges that the Horowitz patent discloses these features of the claimed invention. Applicants respectfully submit, however, that the Horowitz patent is merely concerned with effectively performing a text-based search of a database. Thus, at no point does the Horowitz patent teach or suggest identifying a portion of a document, and excluding that portion from the subdocument within which that portion would otherwise have appeared, as recited by dependent Claim 12. Correspondingly, the Horowitz patent does not teach or suggest serving a subdocument from which a portion has been excluded, including an embedded graphical device that can be invoked to retrieve the subdocument including the portion to be displayed separately, as also recited by dependent Claim 12.

7. Claims 13, 14, 19-21 and 37 are Patentable

The Official Action rejects Claims 13, 14, 19-21 and 37 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the method of independent Claim 17 is patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 19 and 20 each depend from independent Claim 17, Applicants respectfully submit that dependent Claims 19 and 20 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claim 17.

Independent Claim 13 of the present application recites a method that includes receiving, from an origin server, a machine readable file containing a document that is to be served to a

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client for display on a client device, the file being expressed in a language that does not organize segments of the document in a hierarchy, and converting the file to a language that organizes segments of the document in a hierarchy. The method also includes traversing the hierarchy and assembling subdocuments from the segments, where at least some of the subdocuments are assembled from more than one of the segments. As recited, assembling of the subdocuments conforms to an algorithm that tends to (a) balance the respective sizes of the sub-documents, (b) favor assembling the subdocuments from segments that have common parents in the hierarchy, and (c) assemble the subdocuments from segments for which replications of nodes in the hierarchy is not required. At least one of the subdocuments is also expressed in a format that permits it to be served separately to the client, where at least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments. Further, as requested by the client, the subdocuments are individually served to the client based on the contained information that enables it to be linked to another of the subdocuments.

In contrast to the method of independent Claim 13, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest receiving the file (including the document) expressed in a language that does not organize segments of the document in a hierarchy, and deriving the subdocuments by first converting the file to a language that organizes segments of the document in a hierarchy, as explained above with respect to dependent Claim 8. In addition, neither the Horowitz patent nor the Wexler patent teach or suggest deriving subdocuments from a hierarchy of information such that at least one of the subdocuments is expressed in a format that permits the subdocument to be served separately to the client, as explained above with respect to independent Claim 1, the Official Action conceding as much with respect to the Horowitz patent. Again, however, even if the Horowitz patent and the Wexler patent do disclose the respective elements of the claimed invention as alleged by the Official Action (although expressly not admitted as such by Applicants), the Horowitz patent and the Wexler patent cannot properly be combined to teach the claimed invention of independent Claim 1, and similarly independent Claim 13, as suggested by the Official Action.

Independent Claim 14 provides a machine-readable document held on a storage medium for serving to a client, the document being organized as a set of subdocuments. As recited, the

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subdocuments comprise an assembly of segments of the document that are part of a hierarchical expression of the document, where the subdocuments are of approximately the same size. Further, the subdocuments contain information that enables the subdocument to be linked to another of the subdocuments which, includes a URL. In contrast to the method of independent Claim 14, neither the Horowitz patent nor the Wexler patent, taken individually or in combination, teach or suggest a document including an assembly of subdocuments that include a URL linking the subdocument to other subdocuments, as explained above with respect to dependent Claim 23. Again, as explained above with respect to independent Claim 17, the Wexler patent does disclose dividing a document into subdocuments, where a number of subdocuments include links from a parent subdocument to thereby create a natural flow from one subdocument to the next. However, nowhere does the Wexler patent teach or suggest that information in a subdocument that enables the subdocument to be linked to another of the subdocuments comprises a URL, as recited by independent Claim 14. If anything, the Wexler patent discloses that the links are provided via a tree structure notation for rearranging a document from subdocuments.

Independent Claim 21 of the present application provides a method that includes receiving, from a server at a client device, a subdocument of a larger document for display on the client device, and displaying the subdocument on the client device. The method also includes receiving at the client device a request of a user to have displayed another subdocument of the larger document. The other subdocument is received separately from the server at the client device, and displayed on the client device, where the subdocuments are substantially the same length.

In contrast to the method of independent Claim 21, neither the Horowitz patent nor the Wexler patent, taken individually or in combination, teach or suggest receiving and displaying a subdocument of a larger document, receiving a request to display another subdocument, and separately receiving the other subdocument (the subdocuments being of substantially the same length), as explained above with respect to independent Claim 17. The Wexler patent does disclose dividing a document into subdocuments, where a number of subdocuments include links from a parent subdocument to thereby create a natural flow from one subdocument to the next.

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The Wexler patent also discloses that when the system encounters a link node of the document structure tree, the system resolves the link by finding the row in a link destination table providing requisite information relating to the link. Thus, it appears that the Wexler system itself rearranges the document from the subdocuments based upon the links listed in the link destination table. In contrast, the method of independent Claim 21 recites that a subdocument is received and displayed by a client device, which also requests another subdocument that is separately received and displayed by the client device.

Independent Claim 37 recites an apparatus including a network server configured to receive a machine readable file containing a document that is to be served to a client for display on a client device. The server is also configured to derive subdocuments from the file, where at least one of the subdocuments is expressed in a format that permits it to be served separately to the client. As also recited, at least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments. In contrast to the apparatus of independent Claim 37, neither the Horowitz patent nor the Wexler patent teach or suggest a network server configured to derive subdocuments from a hierarchy of information such that at least one of the subdocuments is expressed in a format that permits the subdocument to be served separately to the client, as explained above with respect to independent Claim 1, the Official Action conceding as much with respect to the Horowitz patent. Yet again, however, even if the Horowitz patent and the Wexler patent do disclose the respective elements of the claimed invention as alleged by the Official Action (although expressly not admitted as such by Applicants), the Horowitz patent and the Wexler patent cannot properly be combined to teach the claimed invention of independent Claim 1, and similarly independent Claim 37, as suggested by the Official Action.

8. Claims 32 and 33 are Patentable

The Official Action further rejects Claims 32 and 33 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the methods of independent Claims 1, 17 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 32 and 33 each depend, directly or indirectly, from independent Claims 1, 17 or 21, Applicants respectfully submit that dependent Claims 32 and 33

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are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claim 1, 17 and 21.

Also in contrast to the method of dependent Claims 32 and 33, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving the subdocuments based upon characteristics of the client device, as recited by dependent Claim 31 and by dependency Claims 32 and 33, and as explained above. Further, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving the subdocuments based upon characteristics that are provided by the client in connection with the request (Claim 32), and where the characteristics include the display capabilities of the client device (Claim 33). The Official Action cites the Horowitz patent for support of these features of the claimed invention. Applicants respectfully submit, however, that even considering that the Horowitz patent discloses a client device for displaying search results, the Horowitz patent does not teach or suggest dividing documents of a database based upon characteristics of the client device. In this regard, as explicitly disclosed by the Horowitz patent, documents are divided based upon paragraph boundaries of the documents. Similarly, the Wexler patent discloses dividing documents based upon section segments of the documents. Therefore, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving subdocuments based upon characteristics (e.g., display capabilities) of the client device, where those characteristics are received in a request for the document, as recited by dependent Claims 31-33.

9. Claims 34-36 are Patentable

The Official Action further rejects Claims 34-36 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the methods of independent Claims 1, 17 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 34-36 each depend, directly or indirectly, from independent Claims 1, 17 or 21, Applicants respectfully submit that dependent Claims 34-36 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claim 1, 17 and 21.

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Moreover, in contrast to the method of dependent Claim 36, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving the subdocuments at a wireless communication gateway. In fact, neither the Horowitz patent nor the Wexler patent teach or suggest that any functions are performed at a communication gateway, much less a wireless communication gateway.

As explained above, the claimed invention of Claims 1, 3-14, 17-25 and 30-42 is patentably distinct from the system and method of the Horowitz patent and the Wexler patent. Applicants therefore respectfully submit that the rejection of Claims 1, 3-14, 17-25 and 30-42 under 35 U.S.C. § 103(a) as being unpatentable over the Horowitz, in view of the Wexler patent, is overcome.

E. Claims 2 and 16 are Patentable over Horowitz/Wexler/Burkett

The Official Action rejects dependent Claims 2 and 16 as being unpatentable over the Horowitz patent in view of the Wexler patent, and further in view of the Burkett patent. As recited, dependent Claims 2 and 16, which depend from independent Claims 1 and 14, respectively, further recite that the language providing the hierarchical expression of the document comprises the extensible markup language (XML). In this regard, the Official Action alleges that the combination of the Horowitz patent and the Wexler patent disclose the claimed invention of independent Claims 1 and 14, but neither of which disclose expressing hierarchical information in XML. For this feature, the Official Action cites the Burkett patent, and alleges that one skilled in the art would be motivated to combine the XML feature of the Burkett patent with the Horowitz/Wexler patent combination to more efficiently process the document by selectively streaming document fragments.

As explained above, the Horowitz patent and the Wexler patent cannot properly be combined to teach or suggest the claimed invention of independent Claim 1, and by dependency Claim 2. Even considering that the Burkett patent discloses providing a document in the XML language, Applicants respectfully submit that the Burkett patent does not overcome the deficiencies in the Horowitz and Wexler patents. In this regard, because the Horowitz and Wexler patents cannot properly be combined to teach or suggest the claimed invention of

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independent Claim 1, the Horowitz, Wexler and Burkett patents cannot properly be combined to teach or suggest the claimed invention of Claim 2, which depends from independent Claim 1.

As also explained above, neither the Horowitz patent nor the Wexler patent, taken individually or in combination, teach or suggest a document including an assembly of subdocuments that include a URL linking the subdocument to other subdocuments, as recited by independent Claim 14, and by dependency Claim 16. Likewise, even considering that the Burkett patent discloses providing a document in the XML language, Applicants respectfully submit that the Burkett patent does not teach or suggest a document including an assembly of subdocuments that include a URL linking the subdocument to other subdocuments.

Therefore, Applicants respectfully submit that the invention of dependent Claims 2 and 16 is patentably distinct from the Horowitz, Wexler and Burkett patents. As such, Applicants respectfully submit that the rejection of Claims 2 and 16 under 35 U.S.C. § 103(a) as being unpatentable over the Horowitz in view of the Wexler patent, and further in view of the Burkett patent, is overcome.

F. Claims 26-29 are Patentable over Horowitz/Wexler/Shklar

The Official Action rejects Claims 26-29 as being unpatentable over the Horowitz patent in view of the Wexler patent, and further in view of the Shklar patent. Independent Claim 26 recites a method including displaying a subdocument of a document on a client device, and displaying an icon with the subdocument. In response to invocation of the icon, the method also includes fetching another subdocument of the document from a server and displaying the other subdocument on the client device. As recited, the subdocuments are less than the entire document, where the subdocuments are approximately the same size.

In contrast to the method of independent Claim 26, and as conceded in the Official Action, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest displaying a subdocument of a document along with an icon, and in response to invocation of the icon, fetching another subdocument of the document. Nonetheless, the Official Action alleges that the Shklar patent discloses representing a set of objects by a stack of icons, and that it would have been obvious to combine the representation of objects by icons disclosed

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by Shklar with the method disclosed by Horowitz. Applicants respectfully submit, however, that even if the Shklar patent does disclose representing objects by a stack of icons, and even if the Horowitz method were modified to incorporate this representation of objects, the combination of the Horowitz, Wexler and Shklar patents still does not teach or suggest the claimed invention of independent Claim 26. In this regard, none of the Horowitz, Wexler or Shklar patents, individually or in combination, teach or suggest fetching a subdocument of a document in response to invocation of an icon displayed along with another subdocument, as recited by independent Claim 26. In fact, the Official Action has not alleged any prior art, including any of the Horowitz, Wexler or Shklar patents, that teach or suggest this operational capability of the icon displayed along with a subdocument.

Applicants therefore respectfully submit that independent Claim 26, and by dependency Claims 27-29, is patentably distinct from the Horowitz, Wexler and Shklar patents, taken individually or in combination. In addition, Applicants respectfully submit that dependent Claims 27-29 include features further patentably distinct from the Horowitz, Wexler and Shklar patents, taken individually or in combination.

In further contrast to the method of dependent Claims 27, 28 and 29, none of the Horowitz, Wexler or Shklar patents, individually or in combination, teach or suggest that only a portion of each subdocument of the document is displayed at one time (Claim 27), where an indication of the position of the currently displayed subdocument in a series of subdocuments is also displayed (Claim 28), and where the indication includes the total number of subdocuments in the series and the position of the currently displayed document in the sequence (Claim 29). In fact, other than possibly suggesting the display of results of a text-based search, the Horowitz patent does not teach or suggest any manner of displaying the search results, much less only displaying a portion of subdocuments into which documents of the database is divided, or displaying an indication of the position of the displayed subdocument within a series of subdocuments. Likewise, neither the Wexler patent nor the Shklar patent, individually or in combination, teach or suggest the manner of displaying a subdocument, or an indication of position of the displayed subdocument, in a manner similar to that of dependent Claims 27-29.

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Applicants therefore respectfully submit that the invention of Claims 26-29 is patentably distinct from the Horowitz, Wexler and Shklar patents. As such, Applicants respectfully submit that the rejection of Claims 26-29 under 35 U.S.C. § 103(a) as being unpatentable over the Horowitz in view of the Wexler patent, and further in view of the Shklar patent, is overcome.

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CONCLUSION

In view of the added claims and the remarks presented above, Applicants respectfully submit that the present application is in condition for allowance. As such, the issuance of a Notice of Allowance is therefore respectfully requested. In order to expedite the examination of the present application, the Examiner is encouraged to contact Applicants' undersigned attorney in order to resolve any remaining issues.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,




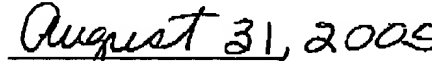
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